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## ON VERSION OF THE CHILD.

NOTES OF A LECTURE AT HARVARD MEDICAL SCHOOL.

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I HAVE spoken of what is called external version, and of the plan of combined external and internal version, which was the subject of an interesting paper by Dr. J. Braxton Hicks, of London. Before going on with the subject of internal or podalic version, I wish once more to call your attention to the method of preparing yourselves for the operation. You have both body and mind to prepare. Are you capable of going on with the work? Do you know what you are to do? If not, stop at once and send for some one else. The time to summon assistance is not after you have begun the operation, but before.

Do you know what the position of the child is? If not, find out all you can before you pass your hand. The child usually comes head first into the world; but almost any part of the head may be in advance, and almost any part of the trunk may be at the entrance of the pelvis; or you may find either knee, or either foot, or either hand. You may find the presenting part to be low down in the pelvis or up above the brim. You may have a well-dilated os uteri or a rigid and undilated cervix. The membranes may happily be entire, and your patient fresh and hopeful; or you may find her despondent, with the water drained away long before you saw her, and the uterus firmly compressed about the child in consequence of the improper use of ergot.

Well, what is to be done? If she should be in convulsions, etherize her, so that you can have time to think, and also to prevent the violence of the paroxysm. Keep her etherized until you have decided how to go on. If she should be flowing much, you have very little time for de-liberation; therefore do all the thinking possible upon these points before you see the cases. In any instance, remember that very many women have gone safely through this operation, and that what you are going to do is for the relief of suffering, to save one life and perhaps two lives. There is nothing to frighten you. If you are frightened send for some one else to do the work, while you stand aside.

Look at this *fœtus*. Both knees are drawn up against the abdomen ; the head is bent forward, with the chin against the thorax ; the elbows are against the chest, and bent so that the hands are turned upward toward the chin. That is the most common way for the child to be packed. The package is egg-shaped, and the larger end of the egg ordinarily, in forty-nine cases out of fifty, at least, lies downward. The lungs of the child have never had air in them. Where are you the more likely to hear the *fœtal* heart ? Why, the point is upon the abdomen of the mother, behind which the left side of the child's backbone lies. As you see, that part of the child is the nearest to the heart of the child, and the point where its sound is likely to be loudest and most distinct. If the water be drained away to any extent, you will perhaps see where the head is and where the breech is, and, if unable to do that, you can make out these two extremes by your hands carefully moved about on the abdominal surface. Now, you have found where the head is and where the breech is, and where the *fœtal* heart sounds the loudest. I think any one of you could now draw the outline of the child, in imagination at least, on the mother's abdomen ; and before you pass your hand, you know about where the feet are to be found. But perhaps you may not hear the *fœtal* heart. There may be other sounds to prevent, or the child may be very feeble from long-continued compression, or it may be that it is dead. I do not always hear the sound when the child is alive, and do not believe that any one of you will always be able to. Suppose that I cannot hear it ; then I try to make out as much as possible by external examination. If that does not give me any aid, and a fat abdomen may prevent, what next ? An internal examination. Is the woman to lie on her back or her side ? That is to depend on her strength, or upon her ability to breathe more easily in one or another position, or upon your method of working. Indeed, before you get through with the operation you may find it necessary to have the woman turn from her back to her left side, or to her right side ; you may have her lengthwise of the bed with her shoulders elevated, or you may put her on her back across the bed, with her feet supported upon chairs.

But stop a moment. How is our patient's pulse ? How is her skin ? How are her pains ? The pulse may be perfectly good, and her pains continue well. There is no reason for waiting, then. But perhaps the pulse is very feeble and very quick ; her skin, which a few hours ago was moist and warm, has become cool, and she has had no pain for some time before you saw her. On the whole, then, it would be as well to wait for reaction to come on. If you interfere now, you may cut off the small chance which she still has. Stimulate her with anything you can get her to take. The doctor or midwife who has been with her for hours before you came has forgotten to feed her, and has neglected

to see to her bladder. All he has been trying to do has been to hurry a case which would have done better if left alone. Give her any stimulant you please which she can take, — wine, brandy, rum with milk, or broth, — and if her depression be very great, let her have an opiate. "An opiate," you say, "will put her to sleep." Perhaps it will, perhaps not; but I should hope for the former effect. If you can get her a few hours' sleep, she will wake with new strength, and you may go on with turning or with any other operation with much more probability of saving your patient. But if she is so very weak, the dose of opium, which would produce ordinarily a long and perhaps a suspicious or a fatal sleep, will simply stimulate her. Perhaps she cannot retain opium upon the stomach. Very well, throw under the skin an eighth or a sixth of a grain of morphia; and if in half an hour she is not positively warmer and more quiet, with a slower and stronger pulse, repeat it.

As soon as this has been done, and again before you begin to pass your hand, see to the bladder. Use a long gum-elastic catheter for this purpose, and do not keep poking about under cover to find the urethral meatus. Neither delicacy nor comfort requires this. See where your instrument goes. If the head is pressed down into the pelvis in any case where it becomes necessary to catheterize, — I do not refer to cases of turning, now, — press it back, if you can, and see where your catheter goes. If you do not, you may put it up into the uterus instead of into the bladder.

But all this aside. You have made your external examination, and know what you are to do; or, not having found out, and your patient being prepared, you are going to examine internally. Keep as calm as you can. You will learn nothing by being excited or by hurrying. First of all, wash your hands. Wash them clean. Use hot water, soap, and a nail-brush if you can get one. If you get into the habit of doing this work without washing, you will soon get careless and go from some case of contagion to do your work. Have your coat off; your shirt-sleeves rolled up; a sheet fastened about you; your hand oiled. But which hand will you use? The one you can use the easiest. I use either, as the patient may happen to be lying; but before I have found the position of the feet I prefer the right hand, if the patient is lying longitudinally on her back on the right side of the bed; because as I stand with my back towards the foot of the bed, and my right side to the bed, this hand will pass more readily into the hollow of the sacrum, and I may not have to remove it. If she is on the other side of the bed I prefer the other hand for the same reason. If she is lying on her left side, with the buttocks to the edge of the bed, the left hand will work the easier. If she is on her right side, why then, for the same reason, I should use the other hand. Now, gentlemen, you may find this a very easy operation; you may reach a

foot or a knee, and finish the whole matter in three or four minutes. You may feel satisfied, however, from the beginning, that mutilation of the child must be done; but the patient prefers to go through with a long and tedious attempt at turning, first, and you may consider it safe. You may be obliged to remove your hand because it is tired out, and try the other. You may sit in a chair, or on the bedside, or you may be obliged to kneel; yes, in consequence of lowness of the bed, you may even be obliged, as I have been before now, to lie on the floor to do the work. You may find a moist, distensible vagina, or you may find it small and not much lubricated with mucus. You may find a well-dilated os uteri, or it may be a partially dilated and rigid one. The latter condition you are not likely to find in most cases where turning is necessary or advisable. You may feel the child's ribs or an axilla, which is not to be mistaken for the cleft of the nates. The hand of the child may be the part you first touch. Do not mistake it for a foot. How is this possible? Why, the parts may be so contracted about your hand that your touch is very much impaired. Still you may be able to close the fingers into the palm, and you may be able easily to make out the thumb. There may be room enough to enable you to distinguish a heel. If there is not room, what objection is there to pulling down the limb? None at all, if you can do it. The uterine contraction is perhaps powerful. Wait till it has relaxed. Indeed, if your hand has got well into the uterus you will probably be obliged to let your hand flatten out upon the surface of the child, in consequence of the pain which you will experience. But as soon as the contraction ceases, grasp the part again between two of your fingers, rather than with your thumb and fingers. The act requires less room. Suppose you have a foot. That is what you were hunting for. Draw it down. It does not advance. Well, do not let it go back. Hold it firmly, if you have got it, and, during the next interval between pains, manipulate with the other hand on the outside of the abdomen, and you will soon find a change taking place in the form of the abdomen, and an advance going on. If not, you will feel sure that if you could get both hands into the uterus you could easily turn the child. That of course is impossible; but you can many times do what will be equivalent to getting both hands in. With the help of an assistant you can pass a noose over your fore-arm and up over the ankle of the child. That is as good as one hand, and will enable you to make traction yourself, or, still better, you can let your assistant draw steadily upon it, while, with one hand in the uterus and one outside, you manage to manipulate to advantage. If the child is surely dead, you may grasp this foot with a pair of strong forceps, instead of using the cord, and go on in the same way.

But suppose you are sure that it is a hand which you have got in your grasp; then what are you to do? To begin with, let me say again,



do not be alarmed. If there be room enough, why, let it alone, and hunt for a foot. You will be surprised at the amount of room in that uterus. You will be astonished at the number of limbs that you can feel; knees, elbows, hands, and feet seem to be everywhere. Grasp a knee, if you can, and draw that down, or a foot; and one foot is enough. If you can turn with one foot it will be better than two, because there is less reason to fear compression of the umbilical cord after the body is born as far as the umbilicus. We will suppose that you have got a hand, and there is not room to feel for anything else; pull that down as far as you can, to enable you to find the position of the fetus. You need not fear making the case any more difficult by doing so. You are sure it is a hand. Supinate it in the vagina, or out of the vulva, if you can get it so far, and thus find out which hand it is, and which way the child is lying. If the thumb and your thumb are on the same side when the palms meet each other, you will know that this particular upper extremity corresponds with the hand that you are examining with. If the thumbs do not come together, they are not hands of the same side. Furthermore, if you have drawn down this arm and supinated it, the palm of the child is aiming exactly in the direction of the anterior surface of its body, and the thumb is pointing in the direction of its head. Put a cord about the wrist to keep the extremity on one side or other of the pelvis, while you introduce your hand again; and knowing where the head lies, where the anterior part of the body is, and where the back of the child is, you will have no great doubt about the position of the feet. In most cases you will have no further difficulty. Drawing down the foot when you have grasped it, relaxing the hold upon the upper extremity, manipulating externally, — all this during intervals between pains, — you will usually find the hand drawing back, and the child turning in the uterus and coming down. Now keep pressure on the abdomen, so that if possible the chin may be flexed upon the sternum, and extract slowly and during pains. There need usually be no hurry until after the umbilicus is born. Then, however, extract as rapidly as you can, because the cord is going to be compressed, and if too long compressed the child will suffocate. Remember that its breathing apparatus, before it is born, is the placenta, and as soon as the cord is compressed the child will struggle as if it were in the world and access of air was prevented by a string about its neck.

Remember also that anterior dorsal positions are always more safe for the child than posterior dorsal positions. Therefore, as soon as the buttocks are born, if the child be coming in a posterior dorsal position, gradually turn it upon its longitudinal axis, so as to bring its back in front. During all this, if possible, have the uterus compressed externally by an assistant. With all the care you can exercise, with all the knowledge you may possess, and with all the assistance you can have

from others, these cases frequently are fatal to the child, even when you know that the child was alive up to the time of the umbilicus passing out. You will often be surprised to find that your case has not terminated as you anticipated. Do not promise too much. You may be mistaken in the result of your examination. You may be positive, during your examination with a cramped hand, that there are more fetuses than one. You may be sure that the two hands which you have felt, or the two feet that you have reached, are of different sizes, and belonging to twins, and when they come into the world you find one child only. The truth is that every one makes mistakes sometimes. If he does not, or if he says he never made a mistake, you may be sure of this — either he does not tell the truth, or he has had a very limited business.

When the child is born as far as the axilla, you must bring down the arms; and this is to be done, as I show you, by sweeping its hands over its face. Do not attempt to carry them the other way. If you do, there will be dislocation or separation of the epiphyses to look after. And now, which hand will you bring down first? No one can tell which will be the easier moved, except he be with the patient. In some cases I find the one which lies more anterior in the pelvis, sometimes the other, to be better. You can tell after a moment's examination.

And now for the head. Still have the external abdominal pressure kept up, so that the uterus may not relax, and so that the chin may be well forced down. Now is the time when the cord is the most compressed, and a finger in the mouth of the little one, if the vagina be well dilated and the perinæum drawn a little back, will allow it to gasp, perhaps, and to live for a minute longer than it otherwise would. Surely it has sometimes been the case that a minute of intra-vaginal gasping has saved a life.

A few words more of caution concerning your hurrying. What are you hurrying for? Not to save the mother. That was done when the breech passed into the world. You are hurrying to save the child. Be sure, then, that you do not kill it by pulling so hard as to dislocate its vertebrae, or even pull off its head. I remember a case in which this was done in this city many years ago. Remember the axis of the curve through which the child is passing, and do not pull the child forcibly forward against the pubes, nor too far backward against the sacrum. Remember also that by getting an assistant to put a finger into the vagina and to press back the perinæum, you will cut off a part of the curve and shorten the distance it has to come. If the head is retained when so far down, you can frequently disengage it by pressing a little backwards, and with one fore-finger pressing the chin a little to one or the other side.

## REMOVAL OF A GREAT NUMBER OF CHERRY-STONES FROM THE RECTUM.

BY WILLIAM H. WESCOTT, M. D., OF DORCHESTER.

IN July, 1875, I was called to see a boy about eight years old who had complained for several days of tenesmus, but had passed nothing, except occasionally a small amount of mucus tinged with blood. He had taken several doses of cathartic medicine, with no result other than severe griping and increased tenesmus. The mother stated that she could not pass the nozzle of a syringe more than an inch into the rectum. I found the bladder enormously distended, and attempted at once to introduce the catheter, but its course was suddenly arrested.

Upon passing a finger into the rectum I found it distended with an unyielding mass of cherry-stones, filling the whole pelvic cavity and pressing the urethra against the pubic arch. The cherry-stones were so firmly glued together that it was quite difficult to separate them by the finger. After about one hundred of the stones had been removed, one by one, by means of ordinary dressing forceps, the boy passed a large quantity of urine. Palpation discovered numerous masses of the stones in the large intestines.

The next morning the rectum was packed quite full again, and the boy could not pass his water. I administered ether, and removed all the stones within reach. The boy soon urinated, and about an hour later had a movement of the bowels, passing many more stones, which were not preserved. After a few days the boy was quite well.

The case was reported some time ago to the Boston Society for Medical Improvement, and the stones, which were then exhibited (measuring six ounces and six drachms), have been sent to the museum of the medical college.

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## THE NEW BATTERY FOR ELECTROLYSIS OF UTERINE FIBROIDS.

BY S. G. WEBBER, M. D.,

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THE battery described in last week's JOURNAL differs very materially from those usually employed for electrolysis. It is exactly the opposite of what is generally recommended, and if used in some cases in which it is desired to produce electrolytic action might lead to failure, or even to an unfortunate fatal result. It would probably be far from safe in aneurism of the aorta. As the article is unfortunately calculated to mislead those who are not familiar with the use of electricity, and as failure might discourage the further use of electrolysis, it may be well to review briefly the subject.

In all batteries there is a certain amount of resistance, depending upon the metals and liquids of which the battery is formed. For each cell, so long as the metals are the same and the liquid retains the same composition, this resistance is the same.

When the battery is in use there is a resistance external to the battery; this resistance in medicine is generally compound, consisting of the resistance of the conducting wire and electrodes and of the resistance of that portion of the body included between the electrodes. The resistance of the body is so great that that of the conducting wire may be disregarded; also that of the battery is comparatively nothing.

Without undertaking to give an explanation of Ohm's law, it will be sufficient to refer to a deduction from it. Moyan<sup>1</sup> states this briefly: "Is the extra-batterial resistance very small, then we should use as few and as large elements as possible; whereas, is this resistance great, then many and small-sized elements are required." Several other authors give essentially the same. J. Rosenthal<sup>2</sup> gives the same deduction in nearly the same terms. Cyon<sup>3</sup> gives it rather more at length. He also adds that as the resistance of the human body is so very great that the resistance of the element may be neglected, the surface of the elements is of no consequence when they are used for therapeutic purposes; the intensity of the current is determined solely by the number of the elements. On the contrary, when used for galvano-cantery the resistance of the element is almost alone to be considered; consequently the number of the elements will not increase the intensity of the current; this will be done by increasing the surface of the elements.

In Miller's Chemistry is found the following statement: "It may be concluded that when the exterior resistance is trifling, as usually occurs when the circuit is metallic and not of very great length, little or nothing is gained by employing a large number of cells; but that when a considerable chemical resistance is to be overcome, power is gained by employing a series numerous in proportion to the resistance so introduced."

The resistance of distilled water compared with that of metals is enormous, being more than six thousand million times that of silver; solutions of different salts conduct better than pure water, but are vastly inferior to metals. The conducting power of animal tissues bears some proportion to the amount of fluid they contain; the resistance is many million times greater than that of copper wire. Hence it will be seen that to send a current of electricity through a layer of water for the purpose of decomposing it, that current must have great intensity to

<sup>1</sup> *Electro-Physiology and Therapeutics*, page 70, New York, 1868.

<sup>2</sup> *Electricitätslehre für Mediciner*, page 73, Berlin, 1869.

<sup>3</sup> *Principes d'Électrothérapie*, par le Dr. E. Cyon, page 37, Paris, 1873.

produce the desired action. The extra-bacterial resistance is so great that all other resistance may be neglected.

In ordinary cases of electrolysis of tumors, the best result would be obtained, then, by having many cells of moderate size; nearly all authors agree in this regard. Frommhold, in considering electrolysis, says,<sup>1</sup>—

“A most important point in electrolysis is the dimension, the amount of surface, of the elements. It is especially desirable, yea, absolutely imperative, to exclude as far as possible every thermic influence which is dependent upon large surfaces, upon large elements. . . . Elements with small surface give no thermic action.”

He then supposes three batteries constructed with the same amount of material. “The first battery contains only six elements. . . . Such a battery is to be used only for galvano-cautery, on account of its great thermo-genetic power.

“The second battery, of twenty elements, gives a current of middle power, useful for therapeutical purposes.

“The third battery, with sixty elements of small surface, works with its greatest intensity electro-chemically, decomposing, destroying. . . . Having only the slightest thermic effect, this peculiarly intensity-current will cause not only coagulation and fluidizing, according as one or the other pole is used, but also by using both poles will so far destroy the malignant tumor in its texture that its specific nutrition must cease.”

Dr. Victor v. Bruns says,<sup>2</sup> “To obtain greater electrolytic effects, galvanic batteries can be used which are composed only of twenty, thirty, forty, and more elements of small size; according to the law that to obtain powerful electrolytic effect the non-essential resistance in the interpolated connecting circuit must be proportional to the essential resistance in the elements.”

Dr. Cutter has, however, obtained good results with his battery in treating uterine fibroids. As he states that “it is an open question whether the galvanic current has anything to do with” the result, and as he makes no mention of having used other batteries with many small elements, it remains an open question also whether as great or greater benefit might not have been obtained with a battery better fitted for electrolysis.

On one important point there seems to have been an omission. The exposed portions of the electrodes should always be within the substance of the tumor, otherwise electrolysis of the healthy tissues and perhaps of the peritoneum would be produced. If the electrodes penetrate the tumor to such a depth, the galvanic current cannot exert any “peculiar

<sup>1</sup> *Electrolysis und Elektrokatalysis*, 1874.

<sup>2</sup> *Die Galvano-Chirurgie oder die Galvanokaustik und Elektrolysis bei chirurgischen Krankheiten*, page 112, Tübingen, 1870.

power in preventing the ordinary results of abdominal traumatic inflammation." Such inflammation rarely follows the tapping of an ovarian cyst.

One author has used batteries constructed somewhat like the one recommended by Dr. Cutter. Dr. Groh<sup>1</sup> is the only one whom I have found who advises their use provisionally, and he limits it to cases where there are tumors of a large mass, under which head uterine fibroids would come. After mentioning the use of batteries with elements of small surface, he says, "The experiments which I made with batteries constructed for galvano-cautery, quantity batteries, lead me to hope that they can also be used with advantage for electrolysis; that we may be able to destroy rapidly, and that therefore the pain excited may be much less than with the same action from an intensity battery."

It is generally objected to elements with large surface that the chemical action is less, while the thermic effect—a real galvano-cautery—is more marked. From my experience at the bedside I do not fully share this opinion.

Then, in cases in which it is desired merely to destroy as quickly as possible large masses, there need be no particular fear of the thermic action, since practically it is immaterial whether the desired object is obtained by the electrolytic power of the current or by the heat also generated, provided the thermic action will not injure neighboring tissues.

Unfortunately Dr. Cutter has not mentioned the number of his fatal cases, nor the symptoms in such cases which might assist in forming a judgment as to the causes of failure, and be a guide against future accidents.

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### SALICYLIC ACID IN ACUTE RHEUMATISM.<sup>2</sup>

BY CHARLES P. PUTNAM, M. D.

THE JOURNAL for February 10th refers to the lately published cases of rapid recovery from acute polyarthritic rheumatism with salicylic acid. The following case is quite as striking as Traube's.

Alice B., five years old, was thoroughly chilled while skating on February 5th, and for several days after had a hot skin, a coated tongue, and no appetite. On the 9th she lay on the bed most of the day. On the 10th she remained in bed. On the 11th, in the morning, her pulse was 120, her temperature (axillary) 102.7°. In the evening, pulse 131, temperature 103.5°. During the latter part of this day she complained much of pain in the muscles of the thigh, in the groin, and in the ankles. She would not move her lower extremities, and could

<sup>1</sup> Die Elektrolyse in der Chirurgie. Wien. 1871.

<sup>2</sup> Reported to the Boston Society for Medical Improvement.

be moved only with great pain. Skin dry. No swelling nor redness of any joints or of other parts of the body. On the 12th the general state was as before; pulse 120, temperature 103°. During the day the hands became painful and sensitive, and the knuckle-joint of the third right-hand finger was slightly swollen and rose-colored.

On the 18th, pulse 180, temperature 102.7°. She had slept somewhat, with five grains of Dover's powder, but the pain and tenderness of the extremities had increased very much, so that the patient lay quite helpless, cried out when touched, and was moved only with the greatest difficulty. Most of the joints of the hands and feet, especially the joints between the first and second phalanges of the right hand and foot, were swollen and rose-colored. Movement of the jaw also caused pain.

Salicylic acid was prescribed, five grains in wafers every hour when the patient was awake. The treatment was begun at two P. M., and eleven doses, making almost one drachm, had been given at ten A. M., next day. No tinnitus aurium was observed by the patient. After the first three doses there seemed to be some improvement, for though the physical appearances remained unchanged, the patient's spirits were better.

After the seventh dose she went to sleep, and was quiet most of the night, only waking often enough to take two more doses. In the morning she turned over in bed, moved the bedclothes with her hands, and wanted to be dressed.

On examination it was found that the redness had left all the joints; they could be moved without pain, and only a moderate œdematous swelling marked the affected parts. The patient complained only of slight itching of the hands and face.

At ten A. M., pulse 120, temperature 101.6°. At six P. M., pulse 124, temperature 102.4°. Five grains of salicylic acid were ordered every two hours during the night, but only three doses were given, as the patient seemed quite comfortable, and slept. On the 15th (forty-eight hours after treatment began) the temperature was 99.9°.

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## RECENT PROGRESS IN OBSTETRICS AND GYNÆCOLOGY.<sup>1</sup>

BY W. L. RICHARDSON, M. D.

### GYNÆCOLOGY.

*Ovariectomy.* — Professor Schroeder has recently taken exception to Dr. Sims's method of establishing a drainage of Douglas's cul-de-sac after ovariectomy. He agrees with Dr. Sims that the majority of deaths after the operation are due to septicæmia, but he does not believe

<sup>1</sup> Concluded from page 187.



that the reddish serous exudation in the peritoneal cavity is necessarily the cause of the septic poisoning. As a rule, transudations and exudations in the abdominal cavity have no tendency to decomposition and the production of septicæmia. As a proof of the correctness of his views, Professor Schroeder cites two cases in which a fatal result from tetanus followed the operation, and in both of which an abundant reddish serous transudation was found in the abdominal cavity; yet in neither were there any symptoms during life of peritonitis. In other cases, wherein the injury to the peritoneum has been very slight, the most marked symptoms of septic peritonitis follow. The difference in these cases he considers to be due to the exposure or non-exposure of the patient to infection. When there has been no infection, the peritoneum absorbs the exudation; while in cases of infection, either the exudation decomposes, or, in cases in which no exudation has taken place, the peritoneum inflames and gives rise to the exudation, and this rapidly decomposes.

It is of course evident, if this view be the correct one, that the object of the attending surgeon should be to prevent infection, rather than to secure the removal of a fluid which without infection is innocuous. In cases in which an infection has taken place, and a decomposing exudation exists in the abdominal cavity, drainage should be at once resorted to. It is extremely difficult, however, to puncture the cul-de-sac of Douglas unless an exudation be inclosed within it; and in these cases puncture is unnecessary, since there can be no danger of absorption or perforation if the exudation is incapsulated. A free exudation in the abdominal cavity does not push forward the posterior vaginal cul-de-sac. The best method, when drainage must be established, is to perform laparotomy, and subsequently to make a puncture of Douglas's cul-de-sac from within, thus allowing the abdominal cavity to be easily washed out.

Dr. Hillas reports<sup>1</sup> a case in which he operated upon a patient in the Ballarat District Hospital, for the removal of a right ovarian tumor. When the peritoneum was opened, not only was a large ovarian tumor, holding eleven quarts of fluid, discovered, but a gravid uterus at about the eighth month of pregnancy was found. This latter had been accidentally incised by the knife of the operator. The ovarian tumor was tapped, and the pedicle secured by a clamp and divided. Recognizing the fact that, owing to the wounding of the uterus, labor must shortly begin, and that probably a rupture of the uterus at the point of injury would occur, it was deemed advisable to perform Cæsarean section. Accordingly, an incision was made, and the fœtus, alive and well developed, was removed with the placenta. The wound in the uterine wall was closed with silver sutures, as was also the abdominal opening.

<sup>1</sup> *Australian Medical Journal*, February, 1875.

The patient vomited for about forty-eight hours after the operation. Great relief from this symptom followed the administration of morphia and ice, and by the fourth day the patient was pronounced comfortable. A discharge of pus from the lower part of the wound followed, but the incision was completely closed within fourteen days. The patient was discharged from the hospital at the end of the sixth week. A month after the operation, she menstruated for four days, and when last seen was in perfect health.

Dr. T. Gaillard Thomas gives a most interesting account<sup>1</sup> of a case in which he performed a double ovariectomy for the removal of solid ovarian tumors. The patient was a married woman, thirty years of age, and the mother of two children. Seventeen months before the operation, she was confined with her second child. Since that time she had been steadily failing, and within the last six months rapidly emaciating. The menstrual discharge had been absent for three months, and the patient complained of some neuralgic pains about the lower part of the abdomen. A physical examination showed a round, hard, immovable tumor, which occupied Douglas's pouch, and filled the upper part of the sacral concavity. A large abdominal tumor could also be felt, extending about three inches above the umbilicus. As the patient was rapidly failing, ovariectomy was performed, and a large, solid tumor, measuring nineteen inches in circumference and weighing four and a half pounds, was removed. An examination showed that the left ovary also was diseased, though to a much less extent, and accordingly it was removed. This latter measured twelve inches in circumference, and weighed one and one half pounds. During the next thirty-six hours all went on well. A profuse uterine hæmorrhage then came on, which recurred about twelve hours later to such a degree as to require the use of a vaginal tampon.

The next day, the patient was evidently sinking from sheer exhaustion. Both the stomach and the rectum ejected all nourishment. It was decided on consultation to try transfusion, and accordingly Dr. Thomas determined to perform the operation, using, however, instead of blood, pure fresh milk. He slowly injected, by means of Colin's transfusion apparatus, eight and a half ounces of fresh milk into the median basilic vein. As soon as about three ounces were injected, the pulse became very weak and rapid, and the patient complained that her head felt as if it would burst. By the time, however, that the whole amount had been injected, she was perfectly quiet. An hour later, she had a decided rigor, the pulse rose to 160, and the temperature to 104°. A few hours later, this high temperature fell, and the patient slept.

The next morning the pulse was 116 and the temperature 99½°; and the patient declared herself decidedly better. During the next twenty-

<sup>1</sup> American Journal of the Medical Sciences, January, 1876.

four hours, iced milk and lime-water in small amounts were given by the mouth, and retained. The patient rapidly convalesced, and on the twenty-first day after the operation walked down-stairs. Six weeks later, the patient pronounced herself entirely well.

*Menorrhagia.* — Dr. N. G. de Mussy reports<sup>1</sup> the details of two cases in which almost immediate relief from a profuse menorrhagia followed the application of bags of hot water to the lumbar region. In the first case some pelvic adhesions were noted on the right side of the uterus, and some ovarian tenderness. Within twenty-four hours after the application of heat as described, the flow was materially diminished, and in two days it wholly ceased. Within two days after, the patient complained of pain in the head, and suffered from a severe attack of dyspnœa and a slight hæmoptysis. All these symptoms ceased, however, within nine or ten days. With the return of the flowing, at the next catamenial period, the heat was again applied, and was followed not only by a cessation of the flowing, but also by the same unfavorable symptoms above alluded to. The menorrhagia subsequently returned, but in decidedly less quantity.

The second case was one in which a miscarriage had probably taken place about two months before. The use of the hot application was followed by an arrest of the hæmorrhage, but the patient complained of a feeling of very great fullness of the head, and several times came near losing consciousness. The menorrhagia was, however, permanently relieved.

*Dysmenorrhœa.* — Dr. Finkel reports<sup>2</sup> the results of an examination of seven specimens taken from four different patients who suffered from so-called membranous dysmenorrhœa. The membranes were in all the cases unmistakable casts of the uterine cavity. Sometimes small fibrinous villi were seen on their external surface. They were formed either by the entire mucous membrane with glands, or by its upper surface only. They consisted of a mixture of glands, vessels, connective tissue, granulation-cells, and particles of fibrine. In all the patients the uterus, which was generally enlarged, was displaced.

The disease is evidently an endometritis, which is characterized by the accumulation of numerous granulation-cells in the mucous membrane and sub-mucous tissue, the elements of which are separated and raised by the cells. An abundant effusion of blood takes place into the deeper layers of the mucous membrane, and thus assists the process. The whole is finally detached and thrown off as a foreign body. It is to the acid action of the vaginal and uterine mucus that the amyloid degeneration noticed in them is due.

<sup>1</sup> *Annales de Gynécologie*, July, 1875.

<sup>2</sup> *Centralblatt für die medicinischen Wissenschaften*, No. 44, 1875.

Dr. Drysdale<sup>1</sup> protests against the tendency, which exists in certain branches of the profession, to attempt to explain all cases of dysmenorrhœa by the supposed existence of some physical cause. He claims that surgical interference rarely proves serviceable in this class of cases, while the occurrence of pelvic abscess or pelvic peritonitis, as the result of such operations, is not at all uncommon. The vast majority of cases are, in his opinion, to be accounted for as having their origin in neuralgia or spasm. Frequently, membranous shreds will undoubtedly obstruct the ready escape of the catamenial flow. He considers that the rational treatment of dysmenorrhœa is to be found in the use of cold baths in the morning, followed by short walks in the open air; in hot baths, which should be begun a few days previous to the expected commencement of the menstrual discharge, and in the administration of palliative remedies during the actual occurrence of the pain. Sometimes these cases are cured at once by marriage, but in other cases no such relief is experienced.

*Nitric Acid as a Caustic.* — Dr. James Braithwaite calls attention<sup>2</sup> to the great value of nitric acid as a caustic in uterine practice. The action of nitrate of silver is too fugitive in its nature. Its influence seldom extends beyond five or six days. It is really a stimulant rather than a caustic, and, as such, frequently causes more or less hæmorrhage. Its action is very superficial and therefore, as a caustic, very imperfect. The use of potassa cum calce is often followed by serious results, owing to its spreading to neighboring parts and to the great depth to which its caustic action extends. The salts of mercury are liable to be followed by symptoms which affect the whole system.

Nitric acid, however, has none of these disadvantages. It is an agent always at hand. Its use produces little if any pain, and no hæmorrhage. The eschar made by it separates very slowly, and the resulting sore is one which shows a great tendency to heal. The fresh mucous membrane is not cicatricial in appearance, and, when healing is going on satisfactorily, has a sharply defined edge. The contraction is greater than that which follows the use of any other caustic, and by this very contraction of the formerly relaxed tissues a permanent cure is often effected. The acid should be applied by means of a small and tightly-rolled piece of cotton-wool. It should never be applied within the cervical canal unless that canal is open. In a series of over forty cases, the results obtained by the use of this agent far exceeded those which followed the use of any other caustic.

Dr. Leblond<sup>3</sup> recommends the use of crayons of iodoform in cases in which there exist superficial ulcerations of the cervix uteri extend-

<sup>1</sup> Obstetrical Journal of Great Britain, October, 1875.

<sup>2</sup> British Medical Journal, November 13, 1875.

<sup>3</sup> Annales de Gynécologie.

ing more or less into the uterine cavity. These crayons are made by rubbing together powdered iodoform and mucilage; the mass is then thickened by the addition of gum arabic, after which it is allowed to harden by exposure to the air. The crayons can be introduced within the cervix, and held in position by a tampon of cotton.

*Fissure of the Neck of the Bladder.*—Professor Spiegelberg contributes<sup>1</sup> a valuable article on this troublesome and painful affection. The pain and spasmodic contractions of which the patients complain are much more constant in this disease than in cases of fissure of the anus, inasmuch as the urine is in almost continual contact with the abraded surface. The occurrence of a vesical fissure, like that of the anus, frequently follows a confinement. The method of treatment which has been chiefly recommended in this class of cases consists in a gradual dilatation of the parts, but not unfrequently this treatment, while it cures the fissure, is followed by a subacute inflammation of the mucous membrane, and by incontinence of urine, which is certainly as troublesome as the fissure was painful. With a view of avoiding these difficulties Spiegelberg advises a rapid dilatation of the urethra, the patient being always first placed in a state of anæsthesia. By means of Busch's uterine dilator, the upper part being removed, the dilatation can be perfectly effected in about a minute, and the urethra can thus be dilated to the extent of about an inch. The dilatation should be at first moderate, considerable force, however, being finally used. Spiegelberg gives the details of two cases of vesical fissure which he treated in this way successfully. The same method of examination can also be used in all cases where the physician desires to make out a diagnosis of any suspected local trouble in the course of the urethra. In this same way he has removed a polypus from the neck of the bladder. By the employment of this method of examination all possibility of confounding a case of vesical fissure with a cystitis, urethritis, or simple neurosis is avoided.

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#### TRANSACTIONS OF THE PHILADELPHIA PATHOLOGICAL SOCIETY.<sup>2</sup>

THE present volume by no means yields to its predecessors in matters of general interest. It furnishes a striking picture of the inner medical life of Philadelphia, and indicates in the strongest possible manner one of the causes of the maintenance of the deservedly high position in American medicine so long held by that city.

The general arrangement of the contents is the same as in previous vol-

<sup>1</sup> Berliner klinische Wochenschrift, xxii. 16, 1875.

<sup>2</sup> *Transactions of the Pathological Society of Philadelphia*. Volume V. Edited by JAMES TYSON, M. D. Philadelphia: Printed for the Society by J. B. Lippincott & Co. 1876.

umes, while the reports are more full. A greater number of specimens is included than in the preceding volume, though the meetings extend over but one half the time. That the interest in the subject is a growing one is thus very strongly shown, and the members of the society may well take pride in the results of their efforts. It is also gratifying to see the thorough interest displayed by the younger men, for most of the truly active members are apparently those who have been admitted since 1860.

Among the rarer specimens is that of Dr. Cleeman, "a congenital imperforation of the duodenum and absence of the gall-bladder." The child was otherwise well formed, and died in five days, from exhaustion. Of other cases of congenital disturbance, the atresia of the vagina, presented by Dr. Schell, has a double interest. The patient was an adult, thirty years of age, in whom there was no external vaginal opening. The dilated vagina held nearly a quart of retained menstrual fluid, but the uterus was not affected. The manner of death from rupture of the vagina and escape of its contents into the peritoneal cavity is of marked practical importance. The admirable report of the special committee to which was referred the imperfect cyclops is an instance of the thoroughness with which the society's work is done.

The specimen of intussusception presented by Dr. Sinkler is a valuable contribution to the ætiology of this condition. The cancerous cæcum was carried into the transverse colon. There is no reference made to the structure of this tumor. If actually a cancer, it would represent one of the rarer tumors serving as a cause for invagination. Adhesions and infiltrations of the surrounding tissues are so likely to form in connection with cancerous cæca that the latter are usually held firmly in position.

The microscopic section from the kidney of a case of hæmaturia, shown by Dr. J. G. Richardson, suggests features in common with those presented by the series of cases reported by Dr. W. S. Bigelow in the *JOURNAL*, some time since. If we remember aright, Dr. Bigelow was unable to observe distinct red blood-corpuscles in the renal tubules, the appearances being regarded as due to amorphous hæmoglobine, as in the hæmoglobinuria of Ponfick.

As a suggestive diagnostic point in the examination of abdominal tumors, Dr. H. L. Hodge calls attention to the power of transmitting sound possessed by a fluid whose chemical and microscopic examination indicated that it came from a cyst of the broad ligament. "Upon auscultating the abdomen of this patient, the gurgling of the intestines could be distinctly heard in front, where the sound on percussion was dull. In other cystic dropsies of the abdomen I have not noticed this symptom. It may possibly prove of value in detecting the existence of cysts of the broad ligament, and in distinguishing them from other collections of fluid."

We had supposed with Dr. Bertolet that the specific cancer-cells were "things of the past," and were not a little interested in the discussion concerning Dr. Mears's ovarian tumor, the gross appearances of which correspond with those of a papillary cystoma. Notwithstanding the difference of opinion manifested during the discussion concerning the diagnostic value of cancer juice, it could hardly have been closed more fittingly than was done by Dr.

Pepper, the president of the society: "It would seem as though much of this discussion turned upon the precise classification adopted for tumors and neoplasms. It is of course well known that this has varied much at different times, and notably since the earlier writings of Paget. There can be no doubt that the latter observer and others of his school very frequently made a correct diagnosis of cancerous growths, so called under their classification, because the character of the expressed juice and particularly the cell-forms it contained formed an important feature in the characteristics of cancer. But at the present time there exists an almost unanimous disposition to accept the classification of recent writers, in which cancer occupies a perfectly definite place, not in the least dependent on the character of juice that can be expressed from a cut surface, nor on the cell-forms present, but upon certain definite anatomical relations and arrangements of cells and intercellular stroma. According to this latter view it is, of course, necessary to employ the mode of examination which alone will afford a demonstration of these relations; and it is evidently impossible that a diagnosis can be made from the examination of fluid."

Dr. Duhring's examination of a specimen of angioma of the skin has an additional interest in connection with the more recent suggestive generalization of Durante concerning the recurrence of *nævi*. From those possessing a structure in which connective tissue predominates sarcomas are likely to result, while carcinomas follow *nævi* of a more epidermoidal character.

The communications of Dr. R. M. Bertolet, on Multiple Cavernous Angioma of the Liver, Tubercular Ulceration of the Larynx and Trachea, and Sclerosis of the Spinal Cord, deserve special commendation for their evident thoroughness. They are characterized not only by a careful and critical examination of the specimens, but also by an extensive research into the recent literature of the subjects.

Dr. Keen's paper on The Anatomical, Pathological, and Surgical Uses of Chloral is included among the miscellaneous contributions. That the seed thus sown was not without its fruit is evident throughout the volume, from the numerous allusions to corroborative experiments.

The committee on morbid growths has faithfully attended to its duties, and, as heretofore, has added largely to the scientific value of the Transactions. The use of the term "amyloid degeneration" of muscular fibre might be objected to as likely to confound the condition with a well-recognized and well-established form of degeneration. We should also question the propriety of designating a sarcomatous degeneration of striated muscular fibres as a myosarcoma. We are not aware of any authentic instances of an acquired sarcoma being composed of voluntary muscle, and the statement of the results in this instance is by no means sufficient to establish the existence of a unique case.

We are able to note merely a few of the interesting features of this publication. The general reader may be somewhat dismayed at seeing so much condensed information, yet there are not a few persons who find it easy to become absorbed even in a library catalogue. There is no intention of suggesting an analogy, as the Transactions are decidedly cyclopædic.



A classified table of contents and an alphabetical index render efficient service to those who are willing to be attracted as well as to those who seek for definite information. We hope Dr. Tyson may long continue in such productive editorial work.

R. H. F.

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### CARPENTER'S PHYSIOLOGY.<sup>1</sup>

A NEW edition of this well-known text-book is before us. In its preparation the same plan has been followed as in previous editions, that is, the results of recent investigations have been introduced into their appropriate places in the text or in foot-notes. A work which grows thus by what may be called an "agglutinative" process (particularly if, as in this case, the editor is not the original author), necessarily becomes less and less readable as the unity of the plan is gradually lost. Besides this defect, the present volume has that of very unwieldy proportions, and it is rather unfortunate that the 1176 pages were not divided between two volumes, a proceeding which the editor suggests will probably be necessary in future editions.

In spite of these objections to the form of the work, it will undoubtedly retain the high place which it has always held amongst text-books of physiology. It now represents very fairly the present state of our knowledge of human physiology, and with its numerous references to original investigations it is, without doubt, for special students of that science the most valuable work of the sort in the English language.

H. P. B.

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### BLACK'S LECTURES ON BRIGHT'S DISEASE.<sup>2</sup>

In this little book of lectures we have a fresh and vigorous study of a subject which is full of interest. The author is a man of positive ideas, and his modes of expression are unequivocal if not dogmatic. A single quotation from the opening lecture will illustrate this prominent characteristic of the book: "Men of scientific pretensions take certain particles of *dead* animal matter, place them possibly in four-and-twenty bottles, and watch the influence upon them of four-and-twenty different solutions called antiseptic, and forthwith rush to conclusions regarding the value of the so-called antiseptic surgery or medicine of modern times, relatively to the complicated mechanism of the *living* body! I have no sympathy, then, for this penchant after 'original investigation' on the one hand, and I have learned to attach little importance to much that is designated 'experience' on the other." It is to be remarked, however, that the conservative skepticism here manifested so emphatically has not deterred the author from a studious examination of the works of many "original investigators," whose results are analyzed and criticised with great acumen, and are often made to fortify his own opinions.

<sup>1</sup> *Principles of Human Physiology*. By WILLIAM CARPENTER, M. D. Edited by HENRY POWER, M. B. Lond. Eighth Edition. Philadelphia: Lindsay and Blakiston. 1876.

<sup>2</sup> *Lectures on Bright's Disease: Delivered at the Royal Infirmary of Glasgow*. By D. CAMPBELL BLACK, M. D., L. R. C. S. Edin. Philadelphia: Lindsay and Blakiston. 1875.

The first part of the book is devoted to the anatomy and physiology of the kidneys. Both these interesting topics are treated comprehensively. The author's theory of the secretion of the urine is summarized thus: The watery portion transudes through the thin wall of the Malpighian capsule, its saline constituents are separated by the cells lining the convoluted tubes, and the watery portion, in passing over the cells, appropriates their contents by a process of solution, dissolving at the same time the cell walls. In support of this theory the experiments of Heidenhaim are quoted; these experiments demonstrate that the aqueous and the solid constituents of the urine are eliminated in different parts and by different elements of the renal tissue.

The various topics relating to the recognized forms of Bright's disease (or cachectic nephritis, as the author prefers to designate it) are concisely yet clearly discussed. Among the subjects touched upon is the relation of renal disease as the local expression of a constitutional diathesis. Inordinate indulgence in alcoholic liquors is declared to be the most prolific cause of the affection.

The anatomical characteristics of the disease receive full consideration at the hands of the author, and the analogous changes found in other organs beside the kidneys are fully described.

In seeking to explain the cause of the so-called uræmic manifestations—convulsions, delirium, coma—the author does not favor Traube's view that they are due to cerebral anæmia, but he regards them as due to the presence in the blood of various extractive, imperfectly oxidized matters.

The clinical history and diagnosis of chronic nephritis are well delineated, and the chemistry of the urine in albuminuria is sufficiently defined. The size and character of the tube casts are described as having a weighty significance with relation to prognosis as well as to diagnosis.

In the discussion of the treatment of acute nephritis the author protests against the "fashionable waiting-upon-death of modern physicians," and boldly declares for the efficacy of general bleeding. At a later stage in the disease, when there are products of the primary inflammation to be removed from the renal tissues, mercury is the best remedy. Later still, counter-irritation over the loins by cantharides or by the actual cautery is recommended. To promote the vicarious elimination of the urinary constituents, the intestines are to be stimulated by cathartics, of which elaterium is preferred, and the skin is to be acted upon by baths, antimonials, and liquor ammoniæ acetatis. Diuretics are absolutely forbidden. We cannot but remark that as the section on treatment is the shortest, it is likewise the least satisfactory part of the work.

The book is embellished with many excellent wood-cuts, which serve to illustrate very clearly the author's text.

## HOMŒOPATHY IN THE UNIVERSITY OF MICHIGAN.

IN a recent number of the JOURNAL we called attention to the annual report of the Michigan State Medical Society, wherein mention is made of an attempt to pass a resolution censuring the regents of the Michigan University for their action in relation to the homœopathic branch of the medical department. This effort to bring about an expression of opinion by the society on a subject which has excited much surprise and comment throughout the country met with an ignominious failure, and the resolution was tabled without discussion. We are therefore not surprised to learn that the faculty claim this action or rather inaction on the part of the society to be a practical indorsement of the course which they have seen fit to adopt. Under these circumstances we shall look forward with some interest to the meeting of the society this spring, on which occasion delegates to the American Medical Association will be selected. As this matter will undoubtedly receive the attention of the national association, the selection of delegates will probably be made chiefly with reference to this question, and can hardly fail to bring about a warm debate.

The principle involved is one which has influenced the profession so universally hitherto, in its attitude towards charlatanism, that any departure from it, even by a single university or state society, cannot fail to become a matter of general interest to physicians throughout the country. We cannot but regret, therefore, that the discussion of this question has been postponed by the society until the eleventh hour, and will then be held under the disturbing influences of an election involving other and opposing interests. The general spirit of reform which is now making itself manifest in the profession will, we trust, exercise a wholesome influence on this occasion, and a desire to act in behalf of the good name and welfare of medicine become paramount to all other interests.

We would remind the members of the Michigan Medical Society that the question which they will be called upon to discuss is not whether it is "a liberal policy" for the faculty of the university to tolerate the presence of "practitioners of a different belief," but whether they shall associate themselves with charlatans without rebuke. However indifferent American physicians may have been to standards of education and some other questions, there is one point upon which they have always held a pretty general and decided opinion, and we feel quite sure that "irregularities" of this kind will not be allowed to pass unnoticed.

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CROUP AND DIPHTHERIA.

A PAPER by W. M. Welch, M. D., entitled Are Croup and Diphtheria Identical? is published in the *Philadelphia Medical Times* of January 22, 1876. The writer states that the most prominent pathological feature common to both of these diseases is the exudation which takes place upon certain portions of the mucous membrane. This membrane has been subjected to chemical and microscopical examination, with the hope of establishing the identity or duality of the two affections, but no very satisfactory result has yet been attained. Those

who advocate the separation of the two diseases believe that the affection of the mucous membrane in croup is usually less profound than in diphtheria. Obviously this distinction is one of degree rather than of a specific nature. The discovery of the presence of micrococci in diphtheritic membranes was supposed by Oertel and others to furnish a means of distinction between the diseases in question. They claimed that these organisms were never present in croup. But recent investigations have shown that the micrococcus may be found in abundance in inflammatory exudations and secretions, whether diphtheritic or non-diphtheritic. As far as the local appearances of true croup and of diphtheritic croup are concerned, Dr. Welch thinks we have no means of distinguishing between the two diseases. The sameness of anatomical changes does not necessarily establish the identity of the two maladies. In considering the etiological and clinical aspects of the diseases it is found that age exerts an influence over the predisposition to both croup and diphtheria, but there is this difference: croup is especially a disease of childhood, rarely occurring after the tenth year. Diphtheria shows a preference to attack children, yet adults are not exempt from it. More males than females die from croup, while diphtheria seems to attack both sexes in like proportions. Cold, moisture, rapid alternations of temperature, and long-prevailing easterly winds are usually the meteorological characteristics of that country or season in which croup is most prevalent, while climate seems to exert no influence over the frequency or fatality of diphtheria. An impoverished condition of the blood, brought about by unfavorable hygienic surroundings, predisposes to the contagion of diphtheria, while croup attacks those of strong physical development. Of the general symptoms of diphtheria there are none which more certainly indicate the constitutional character of the disease than albuminuria. Although this is not a constant symptom, yet it is observed in a large proportion of cases — fifty per cent. or more. It is an important symptom, in connection with both the pathology and the prognosis of diphtheria. The early period of the disease at which it appears points to a rapidly developing general infection, and strongly indicates that the blood is the seat of the primary morbid process. The severity of an attack of diphtheria, according to Oertel, may generally be measured by the presence and amount of albumen in the urine. While it is true that albuminuria sometimes occurs in true croup, yet its presence is rare. Finally, the paralyses which frequently make their appearance during convalescence from diphtheria must be regarded as additional evidence of the specific and constitutional character of the disease. The facts disproving the identity of croup and diphtheria appear of much greater weight to the writer than those which are adduced on the other side of the question, and therefore lead him to conclude that croup and diphtheria are not identical.

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#### MEDICAL NOTES.

— Evidence of the activity of the medical profession in the old town of Salem is given in the organization and successful carrying on of a hospital, which was opened October 1, 1874. A subscription of over seventy thousand

dollars was raised for the purpose, one gentleman, Mr. John Bertram, giving twenty-five thousand dollars. The building is of brick, and is three stories in height. It is divided into two portions, of which the western, containing twenty rooms, is used for the hospital, the eastern being rented. There are at present sixteen beds for patients, and the building contains all the conveniences which usually accompany a well-appointed hospital. As evidence of the usefulness of this charity we would mention that quite a number of both medical and surgical cases of importance have been under treatment, while in addition to an out-patient department an eye and ear clinic has been in active operation. We notice that the use of chloroform as an anæsthetic in the hospital has been forbidden.

Proposals made by the trustees to the secretary of the United States to treat sick and disabled seamen were accepted, and a number of sailors have enjoyed the advantages of the hospital.

The medical staff consists of four physicians and four surgeons. There is also an ophthalmic surgeon and an out-patient staff. Dr. Coggin is the admitting physician. In its general arrangement it resembles the "cottage hospitals" now so much in vogue in England. The expenses for the fifteen months ending with the beginning of the present year were about three thousand dollars. In a quiet and inexpensive way it is doing much good.

— In his monthly summary of the vital statistics of Providence for January, 1876, Dr. Snow, the registrar, remarks, —

"It is a popular idea that very mild weather in winter is very unhealthy. Let us examine this theory. January, 1875, was remarkably cold; January, 1876, was remarkably mild. The first January was colder, and the last warmer, than any corresponding month for many years. Let us compare the mortality results. The deaths from some prominent causes in the two months were as follows: —

	January, 1876.	January, 1875.
Whole number of deaths.....	115	159
Pneumonia.....	15	35
Consumption.....	22	31
Croup.....	5	10
Bronchitis.....	1	6
Scarlatina.....	4	19

"This shows a large decrease in the warm January of the present year, not only in the whole number of deaths, but also, especially, in those causes of death which might be supposed to be influenced by the winter weather.

"This result agrees with my observation for many years past. Extreme cold, or extreme heat, if continued for a week or more, increases the mortality, while more temperate weather, whether in winter or summer, is favorable to health.

"The population of Providence, by the census of June 1, 1875, was 100,675. The mortality last month was, therefore, at the annual rate of only 13.7 in each 1000 of the population. In January, 1875, calling the population the same, the deaths were at the rate of 18.9 per 1000."

— The fifty-sixth course of the Medical School of Maine opened on Thursday, the 17th inst. Dr. John Lincoln, of the Board of Overseers, delivered

the opening address, which was a history of the medical school, with sketches of the more prominent deceased professors. It contained many very interesting facts relating to the history of the profession in New England, and we are happy to learn that it is likely to be published. The medical class will be the largest there has been for several years.

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## MASSACHUSETTS GENERAL HOSPITAL.

### SURGICAL CLINIC.

[SERVICE OF DR. S. CABOT.]

*Fracture and Dislocation of the Ankle.* — W. H. P., aged fifty-three, entered the hospital November 21, 1875. He had received the above injury eight days before his admission. The foot was dislocated backward upon the tibia, carrying with it the tip of the inner malleolus and the lower end of the fibula. The adjacent parts were much swollen and ecchymosed. By forcible extension and elevation of the foot and depression of the tibia the dislocation was finally reduced, but it instantly returned upon relaxing the pressure. An external side splint was applied, and after the dislocation had been reduced, the foot was suspended to a cradle by a sling under the heel, and a sand-bag was placed upon the lower end of the tibia. This held the foot well in place and was quite easily borne. The sand-bag was removed in six days, the foot being kept suspended by the heel for another six days. At the end of this time, no tendency to dislocation remaining, the leg was put upon an inside splint, and made a good recovery, the joint being freely movable when put into a dextrine bandage on December 21st, one month after the beginning of treatment.

The interest of this case, aside from the rarity of the injury, lay in the efficiency of this simple apparatus, which completely overcame a deformity usually very intractable, and not infrequently requiring division of the tendo-Achillis.

*Depressed Fracture of the Skull.* — E. V., a healthy man of thirty, entered the hospital January 19, 1876. One half an hour before his entrance he was thrown and run over by a horse, receiving a sharply depressed compound fracture of the skull on the right side of his forehead, just above and to the outside of the frontal sinus. When brought to the hospital he was in a semi-conscious state, with occasional slight hallucinations. He was easily roused to answer questions quite intelligently, though he remembered nothing of the accident. The pulse was 90, of good character. The pupils were somewhat dilated, equal, respondent. No paralysis was detected. The patient was etherized, and the opening in the skin was enlarged by a crucial incision. The edges of the hole in the skull having been trimmed off, the depressed fragments, which included both tables, were removed. One of the fragments of the inner table had made a minute puncture in the dura mater, through which there was a slight oozing of a clear fluid. Cold-water dressings were applied, and the patient removed to bed. During the first four days after the operation he was much troubled with vomiting and restlessness. The former was finally controlled by one grain of calomel after each act of vomiting, and the latter some-

what mitigated by full continued doses of bromide of potassium. An ice-bag was applied to the head; bread-and-milk diet was ordered, and the bowels, which were inclined to constipation, were freely opened.

On the third day after the accident the pulse was 116, the temperature 103.6°. The patient was restless, but conscious. On the fourth day he was slightly delirious, and in the afternoon noticed for the first time that his left arm was numb and powerless. The pulse was 104, the temperature 104.2°.

On the fifth day examination showed his left leg to be paralyzed, and his head drawn over to the right side. No paralysis of the face or pupils was detected. Temperature in A. M. 102.1°; in P. M. 103.8°.

On the morning of the sixth day the pulse was not so strong as before. The temperature was 103°. In the afternoon the patient seemed somewhat brighter; the pulse had gained in strength and was 108; the temperature was 102.2°. He was observed to move his left leg somewhat, and he continued to have some power over it till his death. A hernia cerebri was noticed forming during this day.

On the seventh day the hernia cerebri was about the size of the tip of the little finger. At 10.30 A. M. the pulse was 116, of fair character; the temperature was 102.4°. At about three P. M. the breathing, which had been quiet, suddenly changed its character, becoming much more rapid (44 to the minute), with a snorting inspiration. The pulse rose rapidly, reaching 172 at five P. M. The temperature rose simultaneously to 107.6°, and at 6.15 the patient died.

*Autopsy*, by Dr. Fitz, revealed the following conditions: On removal of the calvaria, which was intact, the dura mater was seen to be tense; when this had been removed, the inner surface of the right side of the membrane was found to be covered with a thick, greenish-yellow pus, somewhat inspissated. The pia mater, over the entire convexity, was distended tolerably uniformly by a purulent infiltration. The blood-vessels behind were uniformly injected. From the lower edge of the right frontal lobe, a soft, red, and somewhat shriveled mass, looking like a granulation, projected through a hole in the pia mater. The base of the brain was comparatively free from alteration. The ventricles contained no excess of fluid. The cerebral substance was soft and anæmic. On separation of the membranes from the base of the skull no fracture was found. The other organs presented nothing of interest.

*Urethral Calculi*. — E. M. S., aged thirty-two, entered the hospital November 16, 1875, with the following history. Seven years ago, after an attack of renal colic, he suddenly noticed difficulty in micturition, and on examining himself he felt, at the upper part of his scrotum, a hard lump, which he could push back and forth. Of late, since an attempt to remove it, it has become immovable. He has never suffered any pain, only inconvenience from obstruction to the flow of water.

He was etherized, and attempts were made with various instruments to remove the stone, which, though grasped, could not be drawn out on account of a narrowing of the urethra just anterior to it. During these attempts the stone partially broke, and was therefore crushed as far as possible, and left.

During the next two days the patient passed several small pieces, which, to-



gether with a considerable quantity of detritus, were estimated to be about equal to the stone previously felt in the urethra.

An analysis of the stone by Dr. Wood showed it to consist mainly of calcic oxalate, with a little calcic carbonate and phosphate, probably contained in the crust.

A. T. CABOT.

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### THE TREATMENT OF INSANITY.

MESSRS. EDITORS, — I have just received a note from a physician who is well known here as being one of the leading experts in mental disease in Great Britain, from which I take pleasure in extracting as follows: "I wondered, when reading *The Lancet* effusion, who would apply the *tu quoque* to us. The man did not know what he was writing about. It seems to me that the only way in which we are ahead of you is this: We run risks; you endeavor not to do so."

That is a very fair criticism on the treatment of mental disease in America. We try to be *too safe*. We sacrifice cures and the comfort of our patients to our fear of accidents. It is so easy to trust to a camisole, or bed-straps, or bars and bolts, that we do not take time to make careful and accurate diagnoses, and to discriminate as fully as we ought between patients who can be trusted and those who cannot.

C. F. F.

Boston, February 8, 1876.

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### A NEW AGENT FOR STAINING.

MESSRS. EDITORS, — I would like to call the attention of the readers of the JOURNAL engaged in microscopic research to a new material for staining, brought forward by Dr. Ernst Fischer in the *Archiv für mikroskopische Anatomie*.<sup>1</sup>

The facts stated by Dr. Fischer may be condensed as follows: Eosine is a potash salt of tetrabrom-fluoresceine. For staining, an aqueous solution, in the proportion of one part to ten or twenty, should be prepared; of this a few drops may be added to a watch-glass full of alcohol or water; in from ten to twelve hours (often in a shorter time) the specimen may be removed and washed in alcohol or water.

If acids are added to the eosine in solution, the latter is decomposed, and free eosine coloring matter is precipitated; this precipitate may be filtered out and used for forming a solution in absolute alcohol (one part to twenty or thirty); a few drops of this solution added to a watch-crystal of alcohol form the staining fluid. The free eosine coloring matter is soluble in strong alcohol, in ether and chloroform (with the addition of a little alcohol), and very slightly in water.

Preparations which have been hardened in "Müller's fluid" are colored best in the alcoholic solution of the free eosine coloring matter. If eosine is used, the chromic acid of the bichromate of potash precipitates the free coloring matter. If it is desirable to use the eosine, the acid must be neutralized by the use of alkalies. Mold does not form on the solutions of eosine. Mus-

<sup>1</sup> Band xii., heft ii.

cular fibre, particularly the striated, is intensely colored; the axis-cylinder of medullary nerve-fibres is colored a fine rose-color, while the medulla remains colorless; ganglionic cells and their processes take the color slightly, but are well defined in the deeply-colored surrounding tissue; blood-vessels and capillaries are rendered easily perceptible in most tissues; blood-corpuscles take a dark brown color; in organs that have undergone amyloid degeneration the amyloid substance takes a light red color. Fresh preparations are nicely colored in the alcoholic solution, and can thus be hardened and colored at the same time.

Those who would like fuller details as to the chemistry of eosine than those given by Dr. Fischer may refer to *The Chemical News*.<sup>1</sup> Any one who has attempted the purpurine staining, as recommended by Ranvier, and who has succeeded as poorly as I have with it, will be pleased with the new staining material. I have made use of the alcoholic solution of the free eosine coloring matter with preparations that have been hardened in "Müller's fluid;" it gives very transparent specimens, and is not so vexatiously uncertain in its preparation and use as carmine, purpurine, and other red staining fluids. In decomposing the eosine, muriatic acid was used, and although the precipitate was not washed after filtration, I experienced no difficulty in obtaining good results; it will be a most valuable addition to our list of red staining fluids if the color holds well.

Very respectfully,

D. HUNT.

Boston, February 8, 1876.

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### THE OFFICE OF CORONER.

MESSRS. EDITORS, — I have been in hopes that some one would answer your correspondent of January 13th upon the coroner question. In my opinion a great many reforms are needed in regard to the whole question, and as one of the coroners of this city I hope your correspondent will push forward the reform until better men fill the office and better laws govern them. Many of the quacks of Boston (with long names and short) fill the position at present, to the discomfort, to say the least, of those who are trying to be more honest.

A coroner is not called in simply to determine the cause of death, but to decide, according to the facts he can gather, whether or not violence has been done. The present laws do not allow him, save at his own expense, to make a post-mortem examination, unless an inquest has been ordered; and the authority to hold an inquest will be given only when there is clear evidence that some violence has been done. Many times a post mortem would show some proof of violence where at present the case has to go on record as heart-disease, etc.

With regard to juries that have to be summoned in a hurry, often from a surrounding crowd, the power is generally left entirely with the constable; so that men of all sorts are gathered, and often, as your correspondent says, they are most ignorant men. A reform in this direction is much needed. As much care should be taken in the selection of coroners' juries as of those who try cases of murder.

<sup>1</sup> Vol. xxxii., No. 830.

While on this subject, some things might be said regarding certain coroners "hanging on" by telegraph and otherwise to police stations and city hospitals. Of all the coroners of the city of Boston, some of them good men and true, only three or four are ever heard of as holding inquests or views. Great reform is needed somewhere.

REFORM.

Boston, February 19, 1876.

COMPARATIVE MORTALITY-RATES FOR THE WEEK ENDING FEB. 12, 1876.

	Estimated Population.	Total Mortality for the Week.	Annual Death-Rate per 1000 during Week.
New York . . . . .	1,060,000	610	30
Philadelphia . . . . .	800,000	343	22
Brooklyn . . . . .	500,000	242	25
Boston . . . . .	342,000	178	27
Providence . . . . .	100,700	35	18
Worcester . . . . .	50,000	21	22
Lowell . . . . .	50,000	15	16
Cambridge . . . . .	48,000	24	26
Fall River . . . . .	45,000	11	13
Lawrence . . . . .	35,000	12	18
Lynn . . . . .	33,000	13	21
Springfield . . . . .	31,000	7	12
Salem . . . . .	26,000	8	16

Normal Death-Rate, 17 per 1000.

BOOKS AND PAMPHLETS RECEIVED. — *Inhalation in the Treatment of Disease: Its Therapeutics and Practice.* By J. Solis Cohen, M. D. Second Edition, revised and enlarged, with many new Illustrations. Philadelphia: Lindsay and Blakiston. 1876. (For sale by A. Williams & Co.)

*Atlas of Skin Diseases, consisting of a Series of Colored Illustrations, together with Descriptive Text and Notes upon Treatment.* By Tilbury Fox, M. D., F. R. C. P. Parts I., II., and III. Philadelphia: Lindsay and Blakiston. 1876. (For sale by A. Williams & Co.)

*Illustrations of Clinical Surgery, consisting of Plates, Photographs, Wood-Cuts, etc., illustrating Surgical Diseases, Symptoms, and Accidents; also Operative and other Methods of Treatment, with Descriptive Letter-Press.* By Jonathan Hutchinson, F. R. C. S. Philadelphia: Lindsay and Blakiston. 1875. (For sale by A. Williams & Co.)

*A Manual of General Pathology, for the Use of Students and Practitioners of Medicine.* By Ernst Wagner, M. D. Translated from the Sixth German Edition by John Van Duyn, A. M., M. D., and E. C. Seguin, M. D. New York: William Wood & Co. 1876.

*Annual Report of the Directors and Medical Board of St. Michael's Hospital, Newark, N. J.* 1876.